AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (ORIGINAL) A method in a network switch, the method comprising:

first determining a priority for a data frame received on a network switch port;

second determining a depletion of network switch resources; and

selectively outputting a flow control frame on the network switch port based on the determined depletion of network switch resources relative to the determined priority.

2.   (CURRENTLY AMENDED) The method of claim 1, wherein the first determining step includes determining at the network switch port the priority for the data frame at the network switch port.

3.   (ORIGINAL) The method of claim 1, further comprising storing the determined priority within a table configured for storing the determined priority for each of a plurality of the network switch ports.

4.   (ORIGINAL) The method of claim 3, wherein the second determining step includes determining whether an availability of the network switch resources falls below a first prescribed threshold value.

5.   (ORIGINAL) The method of claim 4, further comprising setting the first prescribed threshold value based on a user-defined priority threshold.

6.   (ORIGINAL) The method of claim 5, wherein the setting step includes setting a plurality of prescribed threshold values, including the first prescribed threshold value, based on a plurality of the user-defined priority threshold, respectively.

7.   (ORIGINAL) The method of claim 6, wherein:

the first determining step includes determining the priority from a plurality of available priority values;

the second determining step includes determining whether the availability of the network resources has fallen below an identified one of the prescribed threshold values; and

the selectively outputting step includes identifying from the table the network switch ports having respective priority values less than the corresponding user-defined priority threshold for the identified one prescribed threshold value.

8.   (ORIGINAL) The method of claim 6, wherein the step of setting the plurality of prescribed threshold values includes storing the prescribed threshold values and the respective user-defined priority thresholds in a second table.

9.   (ORIGINAL) The method of claim 3, further comprising deleting the determined priority from the table after a prescribed aging interval.

10.   (ORIGINAL) The method of claim 3, further comprising setting a plurality of prescribed threshold values based on a plurality of respective user-defined priority thresholds.

11.   (ORIGINAL) The method of claim 10, wherein:

the first determining step includes determining the priority from a plurality of available priority values;

the second determining step includes determining whether the availability of the network resources has fallen below an identified one of the prescribed threshold values; and

the selectively outputting step includes identifying from the table the network switch ports having respective priority values less than the corresponding user-defined priority threshold for the identified one prescribed threshold value.

12. (ORIGINAL) An integrated network switch comprising:

a plurality of network switch ports, each configured for receiving a data packet and selectively outputting a flow control frame in response to a flow control output signal; and

a flow control module configured for determining a depletion of network switch resources, the flow control module configured for storing, for each of the network switch ports, a corresponding determined priority value based on the corresponding received data packet, the flow control module selectively outputting the flow control output signal to selected ones of the network switch ports based on the determined depletion of network switch resources relative to the respective determined priority values.

13. (ORIGINAL) The switch of claim 12, wherein each network switch port includes a port filter configured for determining the determined priority value for the corresponding data packet.

14. (ORIGINAL) The switch of claim 13, wherein the flow control module includes a first table configured for storing the determined priority values for the respective network switch ports, and a second table configured for storing a plurality of prescribed resource threshold values and respective user-defined priority thresholds, the flow control module configured for determining whether the availability of the network resources has fallen below an identified one of the prescribed resource threshold values.

15. (ORIGINAL) The switch of claim 14, wherein the flow control module is configured for selecting the selected ones of the network switch ports based on the respective determined priority values being less than the corresponding user-defined priority threshold for the identified one prescribed resource threshold value.

16. (ORIGINAL) The switch of claim 14, further comprising a free buffer queue configured for storing unused frame pointers, each unused frame pointer specifying a corresponding buffer memory location available for storage of frame data, the flow control module configured for determining the depletion of network switch resources based on a comparison between a number of the unused frame pointers in the free buffer queue relative to the prescribed resource threshold values.

17. (ORIGINAL) The switch of claim 12, wherein the flow control module deletes the determined priority value for a selected one of the network switch ports after a prescribed aging interval.

18. (CURRENTLY AMENDED) The method of claim 2, wherein the network switch port includes a plurality of network switch ports, each network switch port includes a port filter configured for performing the step of determining the priority for the data frame received on the corresponding plurality of network switch port ports.